

Online supplementary material

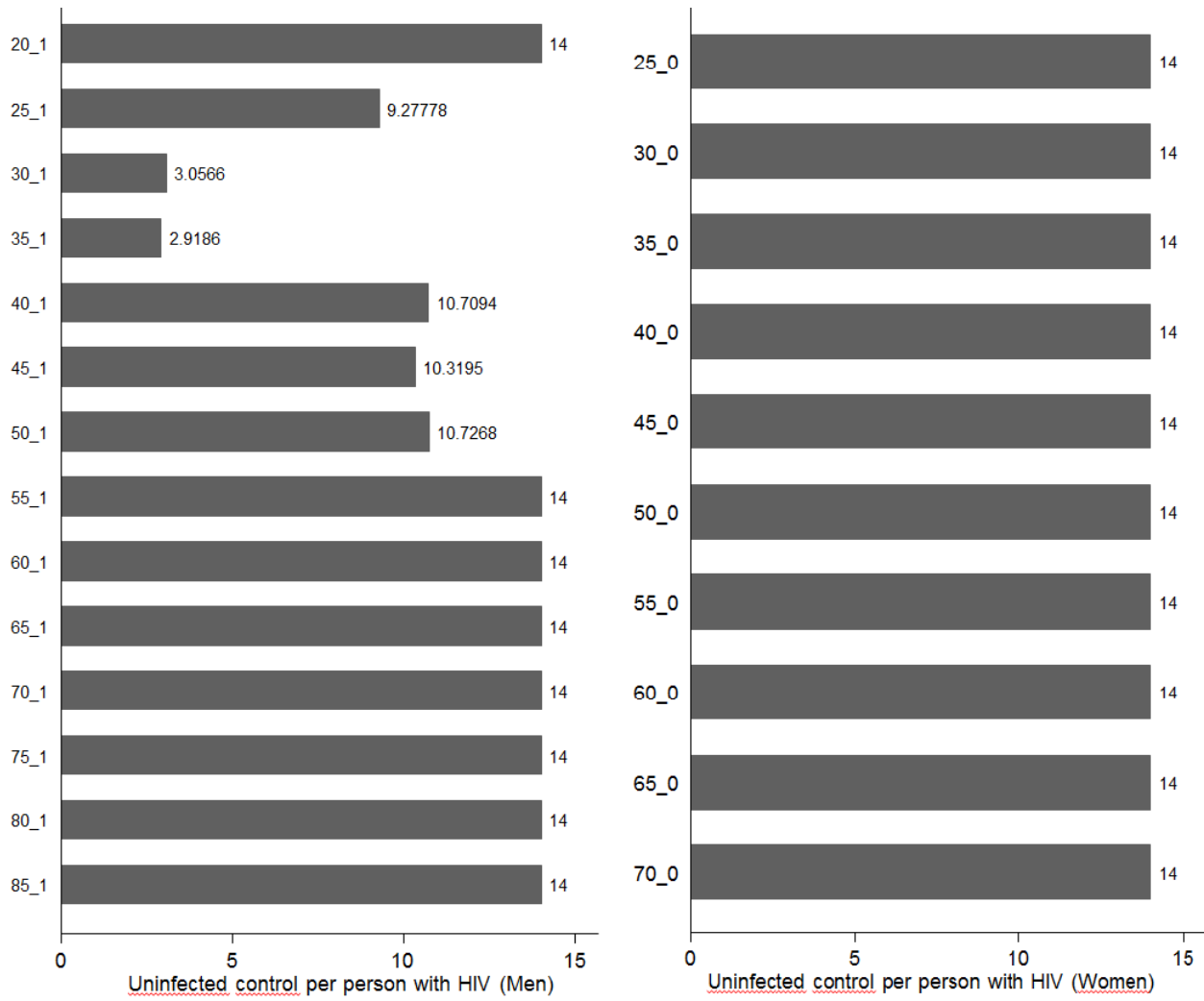
Figure S1. Airflow limitation* prevalence estimates in people living with HIV



*Various definitions for airflow limitation were used. All studies reported $FEV_1/FVC < 0.7$ and seven studies additionally reported $FEV_1/FVC < LLN$. The primary outcome reported by each study is depicted in the figure. The stipulated line indicates average airflow limitation (14.4%) of all studies weighted by study size.

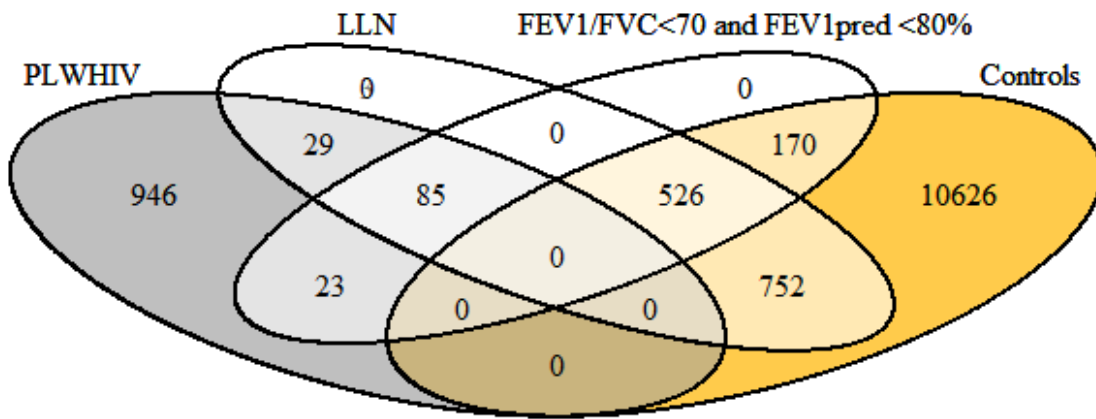
● Studies utilizing uninfected controls. Abbreviations: FEV_1 , forced expiratory volume in one second; FVC, forced vital capacity; LLN, lower limit of normal.

Figure S2. Frequency matching of men and women



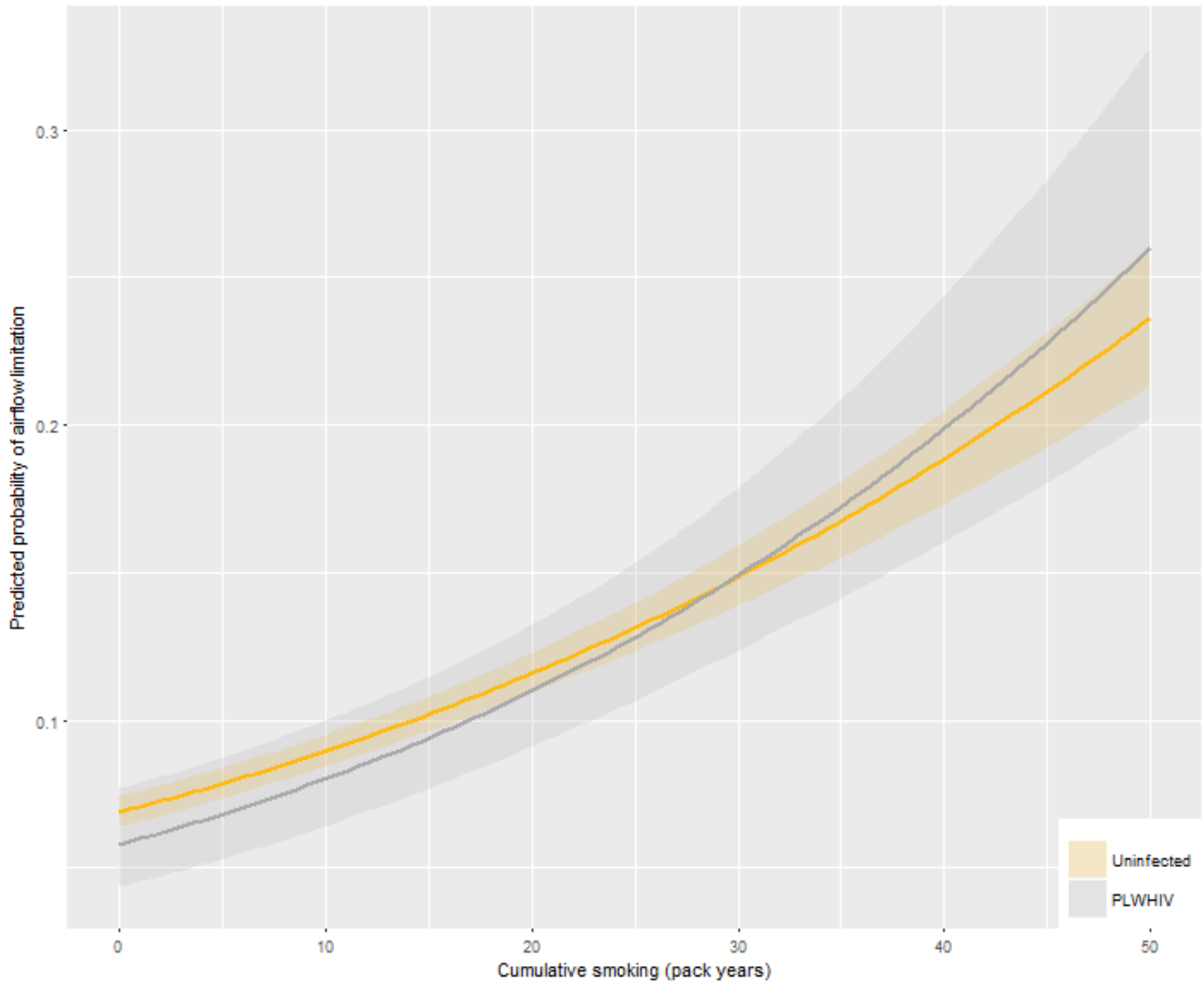
Uninfected controls were frequency matched with PLWHIV by gender and five age year strata.

Figure S3. Venn diagram showing overlap of lower limit of normal (LLN) criterion for airflow limitation and FEV₁/FVC<.07 with FEV₁<80% predicted in people living with HIV and uninfected controls.



Absolute numbers of individuals are indicated for each area/intersection. Abbreviations:FEV₁, forced expiratory volume in one second; FVC, forced vital capacity; LLN, lower limit of normal; PLWHIV, people living with HIV.

Figure S4. Plot of the predicted probabilities of FEV₁/FVC < lower limit of normal (LLN) and 95% confidence intervals.



The predicted probabilities for FEV₁/FVC < LLN were calculated based on a logistic regression model that included age, cumulative smoking, HIV status and the interaction between HIV and cumulative smoking by holding age at its overall mean (52.9 years). P-value for interaction=0.25.

Table S1. Risk factors associated with FEV₁ (L).

	Model 1 β (95%CI) ‡	Model 2 β (95%CI) ‡	p-value*
HIV, yes vs. no	-0.25 (-0.29-(-0.21))	-0.20 (-0.24-(-0.15))	<0.0001
Age, per decade	-0.37 (-0.38 - (-0.36))	-0.37 (-0.39 - (-0.36))	<0.0001
Sex, male vs. female	1.10 (1.07-1.12)	1.05 (1.01-1.09)	<0.0001
Ancestry			
• Scandinavian	Ref	Ref	0.001
• Other European	0.03 (-0.02-0.07)	-0.02 (-0.08-0.04)	
• Middle East	-0.05 (-0.11-0.01)	-0.37 (-0.61—(0.13))	
• Other	-0.31 (-0.39-(-0.22))	-0.29 (-0.39-(-0.18))	
Pack-years of smoking, per 10 pack years	-0.10 (-0.11-(-0.09))	-0.09 (-0.10-(-0.08))	<0.0001
Educational level			
• No education	--	Ref	<0.0001
• Short (< 3 years)	--	0.14 (0.06-0.21)	
• Vocational	--	0.10 (0.05-0.16)	
• Middle length	--	0.18 (0.12-0.24)	
• University degree	--	0.23 (0.17-0.29)	
Pneumonia/acute bronchitis within the past ten years, n (%)			
• No	--	Ref	<0.0001
• 1-5 times	--	-0.09 (-0.12-(-0.05))	
• 6-10 times	--	-0.45 (-0.58-(-0.31))	
• >10 times	--	-0.48 (-0.67-(-0.30))	

‡β-coefficient expresses the expected increase/decrease in FEV₁ (L) for specified change in a predictor. *p-value for model B. p-heterogeneity for categorical predictors was calculated using likelihood ratio tests. Model A adjusted for age, sex, ancestry, cumulative smoking. Model B adjusted for the same variables as well as educational status, self-reported pneumonia, self-reported prematurity, passive smoking exposure during childhood (in years).

